

**Aircraft Type and Registration:** Parsons Gyroplane Model 1, G-BTFE

**No & Type of Engines:** 1 Rotax 582 piston engine

**Year of Manufacture:** 1991

**Date & Time (UTC):** 12 April 1993 at 1550 hrs

**Location:** Chirk Airfield, Ley Farm, Clwyd, Wales

**Type of Flight:** Private

**Persons on Board:** Crew - 1                      Passengers - 1

**Injuries:** Crew - None                      Passengers - None

**Nature of Damage:** Main rotor and propeller destroyed - severe distortion to entire airframe

**Commander's Licence:** Private Pilot's Licence

**Commander's Age:** 47 years

**Commander's Flying Experience:** 556 hours (of which 152 were on type)  
Last 90 days - 86 hours  
Last 28 days - 38 hours

**Information Source:** Aircraft Accident Report Form submitted by the pilot

The gyroplane was taking off from the grass strip at Ley Farm, near Chirk. The strip is aligned north west/south east and the grass surface is 530 metres long. There is a significant down slope from the south east towards the north west. The weather conditions are reported to have been fine, with a surface wind varying from between south and east at 3 to 10 kt.

The pilot reports that, after some discussion with local airfield personnel, he decided to take off towards the north west realising that this direction was on the down slope and to some extent down wind. He made this decision because he considered that an up hill take off might result in a marginal rate of climb over the rising ground which was traversed at the top by a busy road. As the gyroplane accelerated down the slope the rotor speed increased slowly and, at the mid point had had only reached 195 RPM. At that point the aircraft became airborne but soon sank back onto the surface due to insufficient rotor speed. The pilot opted to continue the take off and try to gain sufficient rotor speed.

A 3 feet high wire fence across the end of the runway appeared to be approaching rapidly and the pilot tried to 'hop' the aircraft over the fence. However the tail of the aircraft caught the top two strands of barbed wire and it then struck the ground nose first about 20 feet beyond the fence and settled onto its side. The two occupants were able to release their restraint harnesses and evacuated the aircraft without injury.